

GUEST EDITORS' PREFACE

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This special issue, entitled “Sign Language, Deaf Culture, and Bilingual Education”, contains a selection of invited papers reflecting the importance of cultural and educational aspects of sign language research worldwide to highlight 20 years of Croatian Sign Language (HZJ) research. This important celebration coincides with the 60th anniversary of the Faculty of Education and Rehabilitation Sciences at the University of Zagreb.

HZJ research has been conducted by the Sign Language and Deaf Culture Research Laboratory (HZJ Lab) within the Department of Hearing Impairments at the Faculty of Education and Rehabilitation Sciences. As the only research and teaching institution in Croatia dealing with HZJ on a scientific level, the Department has been firmly committed to the promotion and affirmation of Croatian Sign Language and deaf bilingual education for almost 30 years.

The HZJ Lab was established as a result of the bilateral U.S. - Croatian project (*A Basic Grammar of Croatian Sign Language*), awarded by the National Science Foundation and the Croatian Ministry of Science, Education and Sports to the principal investigators, prof. Ronnie B. Wilbur from Purdue University, and prof. Ljubica Pribanić from University of Zagreb.

The work of the HZJ Lab focuses primarily on the linguistics of Croatian Sign Language (HZJ). The description of its linguistic structure contributes to the recognition of Croatian Sign Language as a full and natural language of the Deaf community in Croatia, as stated in the Recommendation and the Resolution of the Protection and Promotion of National Sign Languages in Europe by the Parliamentary Assembly of the Council of Europe.

It is imperative that the knowledge and findings from the research studies conducted in the HZJ Lab be incorporated into clinical practice and teaching through the development programmes directed at learning HZJ as a second language (L2), training

of interpreters and teachers of the deaf, education of parents of deaf children to promote early communication, acquisition and raising awareness of HZJ as a first language (L1), and raising awareness of how HZJ can improve the educational and literacy outcomes in deaf children.

With this in mind, this special issue has several goals. The first is to present linguistic analyses of various aspects of sign language structure comparison, rather than the more typical comparison of sign languages with their surrounding spoken languages. The second goal is to provide sufficient information for the recognition of sign languages as distinct languages with their own grammars. Although this is a well-known and widely accepted fact, there are still some persistent misconceptions that sign languages are not true, natural human languages. The third goal is to demonstrate what the study of sign languages tells us about the overarching concept of “language”: that language is not speech, and that the brain is capable of transmitting information from one human mind to another, regardless of modality. Finally, the fourth goal is to make clear that natural sign languages have evolved to be produced and perceived in the manual/visual modality as compared to spoken languages, and in contrast to artificially created signed systems of these spoken languages. Although such systems, known as simultaneous communication (speaking and signing at the same time), are widely and often uncritically used, they are not natural sign languages.

Papers in this volume

The papers in this volume are a collection composed of papers divided into four sections: sign language early intervention and bimodal-bilingualism, sign language acquisition and assessment, sign language linguistic analysis, and deaf education and language policy.

The collection begins with an overview by Chen Pichler (*Challenging the oral-only narra-*

tive: Enhancing early signed input for deaf children with hearing parents) of factors that both facilitate and inhibit the acquisition of at least one language (signed or spoken) among children who are deaf or hard-of-hearing. The paper summarizes previous research on early language development in hearing children so as to provide a framework for the prediction of aspects of sign language input that are most essential for early sign language development in deaf children with hearing parents.

The following paper by Ivanova, Sverrisdóttir, and Björk Þorvaldsdóttir (*Raising Handshape Awareness: The Handshape Inventory for Icelandic Sign Language (ÍTM) in Early Intervention and Teaching of ÍTM*) addresses a new and interesting topic, namely the use of rhymes in early language stimulation within the first years of sign language acquisition of deaf children.

The next two papers discuss bimodal bilingualism. The paper by Wong, Tang, Yeung, and Yiu (*Emerging Ecology of a Sign Bilingualism and Co-enrollment Classroom: A Qualitative Analysis*) is a valuable contribution to bimodal bilingual co-enrollment research. Examining the parameters of the Hong Kong program that support inclusive education can be beneficial for those considering implementing a co-enrollment program, those looking for ways to evaluate an existing program, and those training teachers of children with hearing loss.

The first section concludes with an overview by Lillo-Martin, Gagne, and Chen Pichler (*Lessons to be Learned from Bimodal Bilingualism*) of issues related to the language experience of early bimodal bilinguals - two languages in two different modalities, typically spoken (or written) and signed. The authors emphasize the importance of considering children's overall language experience, including the age(s) at which they are exposed to each of their languages, the richness of their language experience, and the ways in which the language learning experience may contribute to the child's linguistic and cognitive development.

The second section contains two papers that focus on sign language acquisition and assess-

ment. The first paper, by Herman and Rowley (*Assessment of sign language development: new insights*), addresses issues related to the development and standardization of sign language tests, taking into account the size and nature of the population of DHH signers.

The next one, by Kolbe (*Open science versus data protection - challenges and solutions in sign language acquisition studies*) discusses a number of important issues and challenges related to the nature of sign language acquisition research. This article makes an important contribution to the discussion of research ethics involving sign languages, Deaf communities, and the language acquisition of Deaf children.

The third section begins with an article by Grose (*Gestures and Adaptive Niches: an Evolutionary Perspective on Co-Speech Gestures*) that presents an evolutionary approach to the analysis of three types of gestures: symbolic emblems, indexical pointing gestures, and iconic representational gesticulations, as used in both spoken and signed discourse. The paper offers new ways of approaching proposed linguistic universals and long-standing issues such as listability in sign languages, while providing a formal approach to gestures.

The section continues with a review paper by Wilbur (*Prosody in sign languages*) describing the theoretical and methodological issues with cross-modal comparisons of prosody. It provides a detailed overview of the relevant research on stress and intonation in sign modality. The paper addresses the debate concerning the status of non-manual markers as prosodic or not by examining in detail how prosody is structured in speech and what potential equivalents might be in sign language.

The next five papers deal with the linguistic analysis of sign languages. The first of them, by Pavlič (*Selected topics in Slovenian Sign Language linguistics: from minimal pairs to question formation*), gives an overview of linguistic research in Slovenian Sign Language. This paper presents relevant background information that needs to be considered when conducting research on grammar, as well as the research topics in linguistics that have been addressed in the last decades.

The work of Keleş and Gökgöz (*Expression of Aboutness Subject Topic Constructions in Turkish Sign Language Narratives*) contributes to a better knowledge of the marking and interpretation of information structure notions in Turkish Sign Language (TİD) as well as to a better understanding of the encoding of information structure notions in sign languages. A novel empirical study on information structure marking and accessibility of referents in TİD narratives is presented.

The work of Pendzich, Cramer, Finkbeiner, Herrmann, and Steinbach (*How do signers mark conditional sentences in German Sign Language? Insights from a Sentence Reproduction Task focusing on the use of non-manual and manual markers*) describes previous work on this type of clause in German Sign Language (DGS) and extends knowledge on the topic by reporting the results of a new experimental task. The paper adds to the body of research using different methods to describe a phenomenon and contributes to the linguistic knowledge of sign languages and of conditional clauses.

The following paper, by Bross (*Fantastic 'at leasts' and how to sign them: epistemic, concessive, and qualifying readings of scalar modifiers of the 'at least' class in German Sign Language*) provides new data and interesting insights into the manual and non-manual realization of scalar expressions in German Sign Language (DGS), making an important new contribution to the study of modifications in sign languages.

The fifth paper in this section by Krebs, Malaia, Wilbur, and Roehm (*EEG analysis based on dynamic visual stimuli: best practices in sign language data analysis*) reviews the best practices in experimental design and analysis for sign language research using neurophysiological methods such as electroencephalography (EEG) and other methods with high temporal resolution. In addition, methodological challenges in neurophysiological research on natural sign language processing are highlighted.

The final section of this volume addresses deaf education and language policy. The first paper by Raičević and Nikolić (*Are we reaching a turning*

point in Serbia with respect to deaf education in Serbian Sign Language?) provides an overview of the challenges facing deaf education in Serbia by examining key policies that have been introduced over the years. It provides a summary of Serbian Sign Language research and discusses the changes in educational policy.

The second paper in this section and the last in the volume, by Rossi Stumpf and Mueller de Quadros (*Beyond Language Policies: Deaf Protagonism, Brazilian Sign Language, and Deaf Education*) presents the policies that have contributed to the recognition of sign language and deaf education. Important concepts of language policy and Deaf rights such as “diversity” and “inclusion” are considered. This paper makes a strong case for the need to consider the voice of the Deaf members of the indigenous Libras sign community in Brazil in relation to the education of Deaf children.

Taken together, these fifteen papers represent a unique and valuable contribution to this special issue. We hope that this volume will underscore the legitimacy of the study of natural sign languages, contribute to early intervention in pediatric hearing loss, and prove that natural sign languages are key to the education and academic success of deaf children. We would therefore like to thank all the authors for their significant contributions.

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In conclusion, we would like to express our heartfelt gratitude to all members of the Deaf community in Croatia who have supported the HZJ linguistic research as participants. Without the tireless willingness of these native signers to donate their time and unique linguistic competence in Croatian Sign Language, it would be hardly possible to conduct any HZJ research. In a way, this special issue is dedicated to them.

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